EXHIBIT 5 (REDACTED)

REDACTED VERSION OF DOCUMENT FILED UNDER SEAL

In The Matter Of:

Illumina Inc v. BGI Genomics

David Blackburn, PH.D.

April 22, 2020

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Min-U-Script® with Word Index

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                UNITED STATES DISTRICT COURT
         FOR THE NORTHERN DISTRICT OF CALIFORNIA
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 3
    ILLUMINA INC, and
    ILLUMINA CAMBRIDGE LTD.,
 4
                 Plaintiffs,
5
                                  Case No.
       v.
                                  3:20-cv-01465-WHO
 6
7
    BGI GENOMICS CO., LTD,
    BGI AMERICAS CORP,
8
    MGI TECH CO., LTD,
9
    MGI AMERICAS INC., and
    COMPLETE GENOMICS INC.,
10
11
                 Defendants.
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            CONFIDENTIAL - ATTORNEYS' EYES ONLY
     VIDEOTAPED DEPOSITION OF DAVID BLACKBURN, PH.D.
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15
                  APPEARING REMOTELY FROM
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                      WASHINGTON, D.C.
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18
                       April 22, 2020
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                         10:30 a.m.
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    Reported by: Lori J. Goodin, RPR, CLR, CRR,
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                   RSA, California CSR #13959
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    APPEARING REMOTELY FROM WASHINGTON, D.C.
    Job No: 2020-84545
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		49
1	BY MR. REINES:	
2	Q. Is it on your screen?	
3	A. Well, my screen timed out, so now I	
4	can't see anything on my screen, so it is just	
5	black.	
6	Q. Pardon me. In terms of the cost of	
7	sequencing, from Illumina, going down, how do you	
8	distinguish whether the extent of that is from	
9	price competition with competitors versus other	
LO	factors?	
L1	A. Well, I think in the first instance	
L2	you would look at what happens to the prices of	
L3	the equipment.	
L4	If the gene sequencing price is	
L5	going down, but the price of the equipment is	
L6	unchanged, then, you know, I don't think there	
L7	is then there is no price erosion. Right?	
L8	You haven't even had price erosion.	
L9	Prices are the same. The throughput is	
20	increasing. Technology is improving and that is	
21	what is driving the price of sequencing down.	
22	But, if you have prices of the	
23	equipment changing, you know, there is a lot of	
24	different ways you can do it.	
25	It is going to depend on the	

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1	particulars in the case, you know, two years from
2	now or a year and a half from now or whenever we
3	are at trial and what has come up in discovery.
4	But, in general, you are going to
5	take advantage of differences in competition.
6	So, again these are all
7	possibilities. I don't know what the right
8	approach would be.
9	But, one possibility is you would
LO	look at customers where there is direct
L1	competition versus customers where there is not
L2	direct competition.
L3	You might make, you might need to
L 4	you know, that could be done on sort of customer
L5	by customer basis, particularly if there is not
L6	many customers that defendants compete for.
L7	There are econometric techniques
L8	that you can use, linear regression and things
L9	like that, where you can suss out you know,
20	you can measure different changes in the market
21	and use those to differentiate which of those are
22	driving changes in prices over time.
23	I mean, like I said, I don't know
24	which one is going to be the right approach.
25	But, those are the sorts of things

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1	you would look at or you would consider at least
2	as the way to go.
3	Again, that is establishing that
4	is assuming there is price erosion. Again, there
5	might not be. But, again, we will know.
6	Q. When you say we will know, is that
7	using one of those methods that you have just
8	described?
9	A. Yeah, I mean, that is not an
LO	exhaustive list. Those are the two that jump to
L1	mind as potential approaches.
L2	But, yeah, it might be those. It
L3	might be something similar. It might be
L4	something it might be something else that is
L5	not popping in my head right now.
L6	But, distinguishing, first
L7	identifying whether or not there are price
L8	changes or price drops.
L9	And then distinguishing whether
20	those are due to competition from what is
21	ultimately held to be patent infringement or due
22	to other factors is, you know, sort of run of the
23	mill stuff for calculating damages and
24	calculating price erosion.
25	Q. Okay. Good.

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1	is something that you could look on a
2	case-by-case basis, particularly in this case
3	where we are going to have, by all
4	specifications, only a small number of places
5	where defendants are seeking to compete.
6	That you could then do something
7	similar and look on a case-by-case basis to
8	identify price erosion.
9	Q. And that is the assumption that
10	A. Part of everything that I spoke
11	before, about how one would calculate price
12	erosion then.
13	Q. And is it your belief that the only
14	instances of price erosion would be where the
15	infringing product is actually being considered
16	by the purchaser?
17	MS. SCOTT: Objection, vague.
18	THE WITNESS: No, I don't think I
19	said that.
20	BY MR. REINES:
21	Q. Okay. What are the circumstances in
22	which you would expect to see price erosion based
23	on the many price erosion opinions that you have
24	given, outside of a customer that is actively
25	considering both products?

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1	MS. SCOTT: Objection.	
2	THE WITNESS: Well, we could see	
3	what happens. So, trying to predict or expect	
4	is you know, there is no point in that.	
5	We will see what happens. But, what	
6	might happen, for example, is Illumina might	
7	decide that they are going to lower prices across	
8	the board because of competition.	
9	From everything that I understand,	
10	there is a pricing committee at Illumina that has	
11	regular meetings and talks about pricing of	
12	products.	
13	And if they are going to lower	
14	prices across the board even to customers who are	
15	not approaching Illumina and saying that there is	
16	an alternative that they are thinking about	
17	turning to, that that would show up in	
18	discussions and decisions made by the pricing	
19	committee.	
20	So, that would be one place to look	
21	to see whether that sort of thing happened.	
22	But, again, we will see.	
23	BY MR. REINES:	
24	Q. What would be the other places to	
25	look?	

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1	A. I don't know. We will see when,	
2	when it happens. We will see how it happens, but	
3	that is the obvious place to look to me.	
4	Q. And would you expect customers that	
5	are not seriously considering purchasing a	
6	competing system to use the fact of the competing	
7	system in the market in an individualized	
8	negotiation?	
9	MS. SCOTT: Objection, vague.	
LO	THE WITNESS: I mean, I wouldn't	
L1	expect it one way or another. They might or they	
L2	might not.	
L3	Again, we will see it in the data.	
L 4	We will see it in the documentation. We will be	
L5	able to look at the pricing. Again, whether it	
L6	is through econometric analyses or case-by-case	
L7	analyses or some combination of the two or some	
L8	other approach, to be able to identify what has	
L9	happened to prices and why that has happened.	
20	BY MR. REINES:	
21	Q. And what is the other competing	
22	approach, other than econometrics and case by	
23	case?	
24	A. I mean, I would just refer to you	
25	the previous answer. Those are the two that jump	

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1	out to me right now.
2	But, I don't want to close off the
3	possibility, if this trial moves forward, if the
4	defendants enter, that those are the only two
5	possible approaches.
6	Q. I'm just asking you as someone
7	you say you have done many price erosion
8	analyses. What other analysis have you used,
9	other than case by case and econometrics?
10	A. I mean, those are I don't know
11	that there is more that I have done. But, again,
12	it is like, it has been a long time, so I don't
13	know.
14	Q. What do you mean it has been a long
15	time? When is the last time you did a price
16	erosion analysis?
17	A. I mean, I have been doing them for
18	years. So, if I did something 11 years ago, I
19	don't know, I don't remember.
20	Q. The only two methods you can
21	identify right now is, for the calculation of
22	price erosion is case by case or econometrics or
23	a hybrid of both. Is that correct?
24	A. As I sit here right now, yeah, I
25	think that is correct.

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1	Q. And econometrics you refer to linear
2	regressions; is that correct?
3	A. I did.
4	Q. Any other techniques you would use
5	in the econometrics method that you are referring
6	to?
7	A. I don't think so. I mean that tends
8	to be what I think of when I use the word,
9	econometrics.
10	You know, linear regressions have a
11	wide range of different approaches within them.
12	But, I mean, I suppose it is
13	possible you can do nonlinear analyses. I don't
14	think you would need to in a case like this, but
15	it is possible.
16	But, that is sort of what I had in
17	mind.
18	Q. Okay. When you say sort of what you
19	had in mind, was that actually what you had in
20	mind?
21	A. Well, I mean, again, like I said,
22	there are things beyond linear regression. You
23	could do nonlinear regressions, things like that.
24	So, I think sort of, what I had in
25	mind is as imprecise as it sounds. That is the

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1	precise answer.	
2	Q. And have you done nonlinear	
3	regressions for price erosion?	
4	A. I don't know.	
5	Q. When you say you don't know, you	
6	just don't remember one way or the other; is that	
7	correct?	
8	A. That's correct. I don't think so,	
9	but I couldn't close off the possibility.	
10	Q. And would your linear regression	
11	econometrics analysis be able to value the	
12	non-price terms?	
13	A. Again, I think if you can identify	
14	the non-price terms, then you can place a value	
15	on them.	
16	If you can place a value on them,	
17	then you should be able to use, again whatever	
18	the technique is, use those to differentiate what	
19	is going on and why.	
20	Q. And, for example, cooperation on	
21	additional, other research programs, how would	
22	you place a value on that?	
23	A. I mean, as I sit here I couldn't	
24	tell you. I haven't seen the contract. I don't	
25	know what are in those terms.	

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1	But, people value terms and
2	contracts all of the time. So, I don't see why
3	there is any reason to think why you wouldn't be
4	able to value those sorts of terms.
5	Q. So, your general assumption is that
6	virtually all contract terms are going to have a
7	price that you quantify when you get excellent
8	people like NERA to do it, correct?
9	A. I mean, I am not sure that I would
LO	say it in that sarcastic way that you did, but
L1	Q. No, let me stop you there.
L2	Obviously, I didn't imply well,
L3	obviously he works for NERA. There is nothing
L4	sarcastic.
L5	You misunderstood me. Let me re-ask
L6	the question.
L7	Your view is that with sophisticated
L8	damages experts, that they can put a price value
L9	on virtually any negotiated contract terms; is
20	that correct?
21	A. So, I guess here is how I would say
22	it. It might not be a damages expert. It might
23	be an expert in some other field.
24	So, I think that it is always true
25	that there is some monetary value that you could

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1	attach to a contractual term.	
2	If you and I are having a	
3	negotiation and I want to enter some term and you	
4	don't want to enter that term, there is an amount	
5	of additional money I could pay you to get you to	
6	accept that term.	
7	And there is some amount of	
8	additional discount that you could give me to get	
9	me to give up that term.	
LO	With a number of different	
L1	contracts, some of which have those terms, some	
L2	of which don't, you certainly could be able to	
L3	identify how the price changes, depending on	
L4	whether those terms are in there or not in there.	
L5	So, that is one way you could get	
L6	at it.	
L7	And, it is also something that could	
L8	be the potentially be the subject of expert	
L9	testimony from a non-damages expert.	
20	Q. And part of the basis for your	
21	opinion that you believe damages are calculable	
22	here is because whatever the terms are in the	
23	supply agreements that Illumina negotiates, you	
24	think that sophisticated experts of whatever	
25	discipline would be able to put a price number on	

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1	it; is that correct?	
2	A. I mean, this comes back to the	
3	question of whether or not these changes are	
4	likely to exist in the first place.	
5	I'm not sure that they are. There	
6	is certainly nothing in the PI motion or in	
7	Mr. Van Oene's testimony or his declaration that	
8	says this is a type of harm that is going to	
9	happen.	
10	So, it is not something that prior	
11	to right now when you have been asking me, that I	
12	spent any time thinking about it.	
13	Q. Okay.	
14	A. So, if that is likely to happen and	
15	there is an argument and evidence before that it	
16	is likely to happen, then I would think about it	
17	more.	
18	But, in general, the idea that we	
19	can quantify contract terms, I think that is	
20	generally true.	
21	Q. I believe you stated that the	
22	expected sequencer placements for defendants for	
23	Is that	
24	correct?	
25	A. That is what I said earlier. I	

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1	help overcome some of those and lead to do some
2	research to potentially that could generate
3	sales in the future.
4	But, I think the general principle
5	is that it is essentially it is a marketing
6	what you might classify as a marketing strategy.
7	That you give the product to people
8	who will use it. And that will help you grow
9	sales in the future. That is an investment.
LO	BY MR. REINES:
L1	Q. And in terms of the is it your
L2	belief that you could quantify the expansion of
L3	sales that would result from a KOL site?
L4	A. I mean we will see the sales. So, I
L5	don't think it should be hard to quantify it.
L6	Q. And when you say we will see the
L7	sales and it shouldn't be hard to quantify, can
L8	you explain what that or whatever I guess you
L9	would call it, the straightforward method would
20	be?
21	A. Well, I mean I think you could
22	just I don't understand the question.
23	You just see them. The sales are
24	made. There will be records of it and you will
25	see that the records exist and see the sales.

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1	I'm not sure I understand the	
2	question.	
3	Q. But, let's say there is 100 sales in	
4	the year.	
5	How would you be able to tie which	
6	of those sales contributed to by the presence of	
7	a KOL with the research and barriers that are	
8	appropriate?	
9	A. I mean again, as I sit here, I can't	
10	tell you exactly how you would distinguish it	
11	from sales that would have been made otherwise.	
12	You would do the same sorts of	
13	things that we talked about before in terms of	
14	case-by-case analyses or econometric analyses, in	
15	order to identify the different factors that	
16	happen at different times and how they flow into	
17	customers' decisions.	
18	Q. Can you be any more specific than	
19	that?	
20	A. Not until we see what happens, no.	
21	Q. Do you have any idea whether KOL	
22	sites in the United States would contribute to	
23	increased sales for defendants outside of the	
24	United States?	
25	A. Sorry. I got the end of the	

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1	CERTIFICATE OF COURT REPORTER
2	UNITED STATES OF AMERICA)
3	DISTRICT OF COLUMBIA)
4	I, LORI J. GOODIN, a Certified Shorthand
5	Reporter do hereby certify:
6	That prior to being examined, the witness
7	in the foregoing proceedings was by me duly sworn
8	to testify to the truth, the whole truth, and
9	nothing but the truth.
LO	That said proceedings were taken remotely
L1	before me at the time and places therein set
L2	forth and were taken down by me in shorthand and
L3	thereafter transcribed into typewriting under my
L4	direction and supervision;
L5	I further certify that I am neither
L6	counsel for, nor related to, any party to said
L7	proceedings, not in any wise interested in the
L8	outcome thereof.
L9	In witness whereof, I have hereunto
20	subscribed my name.
21	Dated: April 22 Loudin Loodin
22	J. Joseph
23	Lori J. Goodin, RPR, CLR, CRR,
24	RSA, California CSR #13959
25	My Commission expires May 14, 2021